FORM PTO-1390 (Modified) (REV-01-2000)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTORNEY'S DOCKET NUMBER
TRANSMITTAL LETTER ● THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371		8057/●
		U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR 10/009,980

INTERNATIONAL APPLICATION NO. PCT/ES01/00079	INTERNATIONAL FILING DATE March 2, 2001	PRIORITY DATE CLAIMED March 8, 2000

TITLE OF INVENTION

MOLECULAR METHODS FOR DETECTING GUAR GUM ADDITIONS TO LOCUST BEAN GUM

APPLICANT(S) FOR DO/EO/US

Vincente Javier Benedí Benito, et al.

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☐ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☒ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☐ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (24) indicated below.
4. ☐ The US has been elected by the expiration of 19 months from the priority date (Article 31).
5. ☐ A copy of the International Application as filed (35 U.S.C. 371 (c) (2))
   a. ☐ is attached hereto (required only if not communicated by the International Bureau).
   b. ☐ has been communicated by the International Bureau.
   c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
   a. ☐ is attached hereto.
   b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
   a. ☐ are attached hereto (required only if not communicated by the International Bureau).
   b. ☐ have been communicated by the International Bureau.
   c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
   d. ☐ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
10. ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).
11. ☐ A copy of the International Preliminary Examination Report (PCT/IPEA/409).
12. ☐ A copy of the International Search Report (PCT/ISA/210).

Items 13 to 20 below concern document(s) or information included:

13. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
14. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
15. ☐ A **FIRST** preliminary amendment.
16. ☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
17. ☐ A substitute specification.
18. ☐ A change of power of attorney and/or address letter.
19. ☒ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825.
20. ☐ A second copy of the published international application under 35 U.S.C. 154(d)(4).
21. ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
22. ☒ Certificate of Mailing by Express Mail
23. ☒ Other items or information: Transmittal Letter to the U.S. Designated/Elected Office with Fee Calculation Sheet (2 pages); Notification of Defective Response with Raw Sequence Listing Error Report (5 pages); Amendment under 37 C.F.R. § 1.825 including Statements under 37 C.F.R. § 1.821 and § 1.825 with Certificate of Express Mail (4 pages); Paper copy and diskette of Sequence Listing (4 pages and 1 diskette) and Postcard

PCTUS1/REV03

U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR 10/009,980	INTERNATIONAL APPLICATION NO. PCT/ES01/00079	ATTORNEY'S DOCKET NUMBER 8057/84086

24. The following fees are submitted:.	CALCULATIONS PTO USE ONLY

BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)) :

☐ Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO $1040.00

☐ International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO $890.00

☐ International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO $740.00

☐ International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4) $710.00

☐ International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4) $100.00

ENTER APPROPRIATE BASIC FEE AMOUNT = $0.00

Surcharge of **$130.00** for furnishing the oath or declaration later than ☐ 20 ☐ 30 months from the earliest claimed priority date (37 CFR 1.492 (e)). $0.00

CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	
Total claims	- 20 =	0	x $18.00	$0.00
Independent claims	- 3 =	0	x $84.00	$0.00
Multiple Dependent Claims (check if applicable).		☐		$0.00

TOTAL OF ABOVE CALCULATIONS   = $0.00

☐ Applicant claims small entity status. See 37 CFR 1.27). The fees indicated above are reduced by 1/2. $0.00

SUBTOTAL = $0.00

Processing fee of **$130.00** for furnishing the English translation later than ☐ 20 ☐ 30 months from the earliest claimed priority date (37 CFR 1.492 (f)).   + $0.00

TOTAL NATIONAL FEE   = $0.00

Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31) (check if applicable).   ☐ $0.00

TOTAL FEES ENCLOSED   = $0.00

Amount to be: refunded	$
charged	$

a. ☐ A check in the amount of _____ to cover the above fees is enclosed.

b. ☐ Please charge my Deposit Account No. _____ in the amount of _____ to cover the above fees. A duplicate copy of this sheet is enclosed.

c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. _____23-0920_____ A duplicate copy of this sheet is enclosed.

d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. **Credit card information should not be included on this form.** Provide credit card information and authorization on PTO-2038.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

```
||||||||||||||||||||||
24628
PATENT .TRADEMARK OFFICE
```

WELSH & KATZ, LTD.
120 S. Riverside Plaza, 22nd Fl.
Chicago, Illinois 60606

SIGNATURE

Shannon L. Nebolsky
NAME

41,217
REGISTRATION NUMBER

December 17, 2002
DATE

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents, Box PCT
United States Patent and Trademark Office
Washington, D.C. 20231
www.uspto.gov

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/009,980	Benedi Benito	84086

INTERNATIONAL APPLICATION NO.
PCT/ES01/00079

I.A. FILING DATE	PRIORITY DATE
03/02/2001	03/08/2000

Shannon L Nebolsky
WELSH & KATZ LTD
22nd Floor
120 South Wacker Drive
Chicago, IL 60606

CONFIRMATION NO. 5781

371 FORMALITIES LETTER

OC00000009181997

Date Mailed: 12/03/2002

NOTIFICATION OF DEFECTIVE RESPONSE

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated Office (37 CFR 1.494):

- U.S. Basic National Fee
- Priority Document
- Biochemical Sequence Listing
- Copy of IPE Report
- Copy of references cited in ISR
- Copy of the International Application
- Copy of the International Search Report
- Information Disclosure Statements
- Oath or Declaration
- Preliminary Amendments
- Request for Immediate Examination
- Substitute Specification

RECEIVED
DOCKETING
DEC 10 2002
By
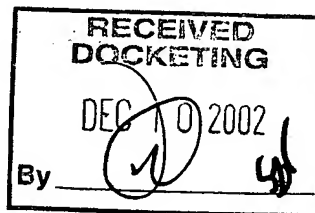
WELSH & KATZ, LTD
2002 DEC 10 AM 8: 39

RECEIVED

Applicant's response filed 11/08/2001 is hereby acknowledged. The following requirements set forth in the NOTIFICATION of MISSING REQUIREMENTS mailed 06/07/2002 have not been completed.

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date. The current oath or declaration does not comply with 37 CFR 1.497(a) and (b) in that it:
  - is not executed in accordance with either 37 CFR 1.66 or 37 CFR 1.68.

Applicant is required to complete the response within a time limit of ONE MONTH from the date f this Notification or within the time remaining in the respons set forth in the Notification of Missing Requirements, whichever is the longer. No extension of this time limit may be granted under 37 CFR 1.136, but the period for response set in the Notification of Missing Requirements may be extended under 37 CFR 1.136(a).

The following items MUST be furnish d within the period set forth below

- • The nucleotid and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):
  - ▪ A copy of the "Sequenc Listing" in computer readable form has been submitted. The content of the computer readable form, howev r, does not comply with the requirements of 37 CFR 1.822 and/or 1.832, as indicated on the attached marked-up copy of the "Raw Sequence Listing."
  - ▪ APPLICANT MUST PROVIDE:
    - ▪ An initial or substitute paper copy or compact disc of the "Sequence Listing," as well as an amendment directing its entry into the specification.

- • For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:
  - ▪ For Rules Interpretation, call (703) 308-4216
  - ▪ To Purchase Patentln Software, call (703) 306-2600
  - ▪ For Patentln Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

A copy of this notice MUST be returned with the response.

SHAKEEL AHMED

Telephone: (703) 305-3659

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/009,980	PCT/ES01/00079	84086

FORM PCT/DO/EO/916 (371 Formalities Notice)

IN THE UNITED STATES DESIGNATED OFFICE/ELECTED OFFICE (DO/EO/US)
OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventors: Vicente Javier Benedí Benito, et al.   )

U.S. Serial No.:   10/009,980   ) Attorney Docket No.:
Confirmation No.:   5781   )   8057/84086
)
Filed under 35 U.S.C. 371 on : November 28, 2001) U.S. Examiner:
    Based on Int'l Ser. No.:   PCT/ES01/00079   ) not yet assigned
    Int'l Filing Date: March 2, 2001   )
) Group Art Unit:
Title: MOLECULAR METHODS FOR DETECTING   ) not yet assigned
       GUAR GUM ADDITIONS TO LOCUST BEAN GUM)

AMENDMENT UNDER 37 C.F.R. § 1.825 INCLUDING STATEMENTS UNDER 37 CFR § 1.821 and § 1.825

Commissioner for Patents
U.S. Patent and Trademark Office
Box SEQUENCE
P.O. Box 2327
Arlington, VA   22002

Sir:

This paper is a Response to the Notification of Defective Response that was mailed December 3, 2002, together with a Raw Sequence Listing Error Report (copies of both are enclosed herewith), regarding the response to the Notice of Missing Requirements under 35 U.S.C. § 371 that was filed July 29, 2002 in the United States Designated/Elected Office (DO/EO/US).

The Raw Sequence Listing Error Report was based upon the new electronic copy of the Sequence Listing that was filed with that response on July 29, 2002. The identical error report is generated by Checker on the copy of that electronic version of the sequence listing that we had retained for our files.

Enclosed herewith is a corrected copy of the Sequence Listing, in both paper and electronic copies. The paper copy has four pages, and is a page numbered version of the electronic copy enclosed herewith, formatted for A4 paper. Please substitute the present paper copy of the Sequence Listing into the specification. The present paper copy is substantively identical to that filed with the original patent application papers on November 8, 2001, and is thus already part of the Specification. Pursuant to 37 C.F.R. § 1.825(a), it is hereby stated that no new matter is introduced via this amendment.

Furthermore, pursuant to 37 C.F.R. § 1.821(h), it is hereby stated that the enclosed submission does not include matter which goes beyond the disclosure in the international application as filed.

Please substitute the enclosed computer-readable form of the Sequence Listing into the patent file, as required by 37 U.S.C. § 1.821(e). The file on the CRF is ASCII output from PatentIn version 2.1, created 03/02/2001 in PatentIn version 2.1 on a Windows 95/PC compatible computer, and modified on 12/17/2002. The Sequence Listing file, "10-009980.txt" was copied onto the enclosed diskette 12/17/2002.
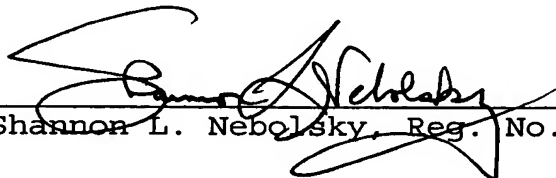
Pursuant to 37 C.F.R. § 1.821(f), it is hereby stated that the sequence listing information recorded in computer readable form is identical to the written (on paper) Sequence Listing.

Because the Biological Sequences are going to a different mailing address, the executed Declaration, making up the remainder of the missing requirements, is being provided on this date under separate cover.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Respectfully submitted,

By _____
Shannon L. Nebolsky, Reg. No. 41,217

Enclosures
  Transmittal Letter
  Fee Transmittal Sheet
  Copy of the Notification of Defective Response
  Copy of the Raw Sequence Listing Error Report
  Paper Copy of Sequence Listing
  Computer Readable Diskette

U.S. PTO Customer No. 24628
WELSH & KATZ, LTD.
120 South Riverside Plaza, 22nd Floor
Chicago, Illinois 60606
Phone (312) 655-1500
Fax No. (312) 655-1501

<u>CERTIFICATE OF EXPRESS MAILING</u>

         I hereby certify that this Amendment under 37 C.F.R.
§ 1.825 including Statements under 37 C.F.R. § 1.821 and
§ 1.825, together with a Computer readable disk, Transmittal
Letter and its stated enclosures, are being deposited with the
United States Postal Service as Express Mail Label No.
EV 045460789 US, postage prepaid, in an envelope addressed to:
Commissioner for Patents, Box SEQUENCE, P.O. Box 2327,
Arlington, VA 22202 on December 17, 2002.

SEQUENCE LISTING

<110> CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS

<120> MOLECULAR METHODS FOR DETECTING GUAR GUM ADDITIONS
      TO LOCUST BEAN GUM

<130> PATENT APPLICATION PCT/ES01/00079

<140> PCT/ES01/00079
<141> 2001-03-02

<150> ES200000560
<151> 2000-03-08

<160> 10

<170> PatentIn Ver. 2.1

<210> 1
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of the Artificial Sequence:oligo ITS5

<400> 1
ggaagtaaaa gtcgtaacaa gg   22

<210> 2
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of the Artificial Sequence:oligo ITS3

<400> 2
gcatcgatga agaacgcagc   20

<210> 3
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of the Artificial Sequence:oligo ITS4

<400> 3
tcctccgctt attgatatgc   20

```
<210> 4
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of the Artificial Sequence:oligo PG21

<400> 4
gctgcgttct tcatcgatgc                                               20


<210> 5
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of the Artificial Sequence:oligo ITS2

<400> 5
tccaaaacaa gatggagtcg                                               20


<210> 6
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of the Artificial Sequence:oligo PG22

<400> 6
tgcctgggcg tcgcgcgtc                                                19


<210> 7
<211> 345
<212> DNA
<213> Cyamopsis tetragonoloba

<220>
<221> primer_bind
<222> Complement((2)..(23))


<220>
<221> SITE
<222> (228)
<223> n=a, c, g or t

<220>
<221> SITE
<222> (273)
<223> n=a, c, g or t

<220>
<221> primer_bind
<222> (325)..(344)
```

<400> 7
```
tggaaggaga agtcgtaaca aggtttccgt aggtgaacct gcggaaggat cattgtcgat 60
gcctcacaag cagtccgacc cgtgaacttg ttttgcttat ttagggttgg tttggggcgt 120
gtcaaaacac gccgaccttc ctttggttgg gagttgtctg ccttgcgtgg ctttctctta 180
gcctttaaca aacccaccgg cgctacacgc gccaaggaaa cttaactntt ctgtgcgccc 240
ttgccagccc ggtaacggtg ctgtgtaggt tgngtttaga tacatgaatc aaaatgactc 300
tcggcaacgg atatctcggc tctcgcatcg atgaagaacg cagca 345
```

<210> 8
<211> 343
<212> DNA
<213> Ceratonia siliquia

<220>
<221> primer_bind
<222> (2)..(23)

<220>
<221> primer_bind
<222> Complement((323)..(342))

<400> 8
```
tggaaggaga agtcgtaaca aggttttcgt aggtgaacct gtggaaggat cattgtcgat 60
gcctcacaaa acgaacgacc tgcgaattgg ttaaactatc gggggcgggg ggcgtgcgtc 120
ctcccaagcc tccatgtcgg gaggcgcctg tggcccccog ccactcgtgc tacctcgacc 180
aaaaaactaa ccctggcgtt taacgcgcca aggaactaca accagtgagc gtgctcccga 240
tgacctggta acggcgatcg atcgatgagc gtcgtgacat tcttatccaa aatgactctc 300
ggtaacggat atctcggctc tcgcatcgat gaagaacgca gca 343
```

<210> 9
<211> 405
<212> DNA
<213> Cyamopsis tetragonoloba

<220>
<221> primer_bind
<222> Complement((2)..(21))

<220>
<221> primer_bind
<222> (385)..(404)

<400> 9
```
tgcatcgatg aagaacgcag cgaaatgcga tacttggtgt gaattgcaga atcccgcgaa 60
ccttcgagtc tttgaacgca agttgcgccc gaagccatta ggccgagggc acgcctgcct 120
gggcgtcgcg cgtcgttgcc ctaactcgga cgtctcattt ggtgtcgttg agtggcgaat 180
gttggcttcc cacgagcgtt gcctcatggt tggttgaaat tcgagtccgt ggtggaggat 240
gccacgattg atatggtggt tgagtaatta gctcgagacc catcgtgagc gactccatct 300
tgttttggac tctttgaccc acatgagcat ctccgatgct cgttacgaga cctcaggtca 360
gacggggtta cccgctgagt ttaagcatat caataagcgg aggaa 405
```

<210> 10
<211> 410
<212> DNA
<213> Ceratonia siliqua

<220>
<221> primer_bind
<222> (2)..(23)

<220>
<221> primer_bind
<222> Complement((385)..(404))

<400> 10
tgcatcgatg aagaacgcag cgaaatgcaa tacttggtgt gaattgcaga atcttgtgaa 60
ccatcaagtc tttgaacaca agttgtgccc gaagccatca agccgaaggc acgtctgcct 120
gggtgtcaca cactgtcgcc cccaccccgt ggcctctcgc gtggcttcga ggaatgggca 180
gattatggcc ttccgtgagc ttcgccttat ggatggccca aaagagagtt cgcggtggcg 240
actgccacga cgcacggtgg atgagcaaag actcaagacc agtcgtgcaa gtgtcatacc 300
cgggattgcg ctcggagacc cttcagcatc gcgaggtgca tatgcctcga acgggaccct 360
aagtcaggcg gggctactcg ctgagtttaa gcatatcaat aagcggagga   410

-4-

MOLECULAR METHODS FOR DETECTING GUAR GUM ADDITIONS TO LOCUST BEAN GUM

Applicant: Benedi Benito, *et al.*   **Atty Ref.:**
U.S. Serial No.: 10/009,980   8057/84086
International Filing Date: March 2, 2001

Patentin 2.1 ouput file: 10-009980.txt (ASCII)

Biological Sequence Listing created 12/17/2002.
In Patentin v.2.1 on Windows 95/PC compatible.
File copied onto this diskette 12/17/2002